

What is claimed is:

1. A roof covering comprising:

a roofing mat formed from fibers of a fiber material, the fibers coated with a sizing; and

5 a coating material that coats the mat, the coating material based on an organic material;

the sizing including a sulfur-containing material that bonds to the fiber material, the sulfur-containing material having sulfur groups that form cross-links with the organic material.

10 2. A roof covering according to claim 1 wherein the sulfur-containing material is a sulfide silane.

3. A roof covering according to claim 1 wherein the fiber material is glass.

15 4. A roof covering according to claim 1 wherein the organic material is asphalt.

5. A roof covering according to claim 1 wherein the roof covering is a  
20 roofing shingle, and wherein the tear strength of the roofing shingle is increased by at least about 5% compared to the same roofing shingle without the compound in the sizing.

25 6. A roof covering according to claim 1 wherein the tensile strength of the roofing mat is not decreased by more than about 2% compared to the same roofing mat without the compound in the sizing, and wherein the the uniformity of fiber dispersion within the roofing mat is not significantly different compared to the same roofing mat without the compound in the sizing.

7. A roof covering according to claim 1 wherein the amount of the sulfur-containing material in the sizing is from about 1% to about 10% by weight of the solids in the sizing.

5 8. A roof covering according to claim 1 further comprising roofing granules embedded in a surface of the coating material.

9. A roof covering comprising:  
a roofing mat formed from fibers of a fiber material, the fibers coated with a  
10 sizing; and  
a coating material that coats the mat, the coating material based on an organic material, and the coating material containing sulfur added to the organic material;  
the sizing including a bonding material that bonds to the fiber material and that  
bonds to the sulfur; and  
15 the sulfur forming cross-links with the organic material.

10. A roof covering according to claim 9 wherein the bonding material is a compound having first functional groups that bond to the fiber material and second functional groups that bond to the sulfur.

20 11. A roof covering according to claim 10 wherein the second functional groups of the compound include double bonds.

12. A roof covering according to claim 11 wherein the second functional  
25 groups are vinyl groups.

13. A roof covering according to claim 12 wherein the compound is a vinyl silane.

14. A roof covering according to claim 9 wherein the bonding material is a material that is bonded to the fiber material by grafting.

15. A roof covering according to claim 9 wherein the fiber material is glass.

16. A roof covering according to claim 9 wherein the organic material is asphalt.

17. A roof covering according to claim 9 wherein the roof covering is a roofing shingle, and wherein the tear strength of the roofing shingle is increased by at least about 5% compared to the same roofing shingle without the compound in the sizing.

18. A roof covering according to claim 9 wherein the tensile strength of the roofing mat is not decreased by more than about 2% compared to the same roofing mat without the compound in the sizing, and wherein the the uniformity of fiber dispersion within the roofing mat is not significantly different compared to the same roofing mat without the compound in the sizing.

19. A roof covering according to claim 9 wherein the amount of the bonding material in the sizing is from about 1% to about 10% by weight of the solids in the sizing.

20. A roof covering according to claim 9 wherein the amount of the sulfur added to the organic material is from about 0.1% to about 5% by weight of the organic material.

21. A roof covering according to claim 9 further comprising roofing granules embedded in a surface of the coating material.